



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,441	03/31/2004	Deniz Erdoganus	5853-406-1	5466
30448 7590 09/23/2008 AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188				
EXAMINER				
JACOB, MARY C				
ART UNIT		PAPER NUMBER		
2123				
MAIL DATE		DELIVERY MODE		
09/23/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/814,441

**Applicant(s)**

ERDOGMUS ET AL.

**Examiner**

MARY C. JACOB

**Art Unit**

2123

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. The response filed 7/8/08 has been received and considered. Claims 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19 and 21 are presented for examination.

### ***Claim Objections***

2. The objections to the claims recited in the 4/8/08 Office Action have been withdrawn in view of the amendments to the claims filed 7/8/08.
3. Claims 1, 8 and 15 are objected to because of the following informalities.  
Appropriate correction is required.
4. Claim 1 is directed to "a method of building a model" that includes "initializing" a model of a physical plant and updating this model. While the specification sets forth that the model is a software based model that executes on an information processing system (paragraph 0016, lines 6-8) and that the method can be carried out in a general purpose computer system (paragraph 0038, lines 5-8), the claim does not reflect that the method is computer implemented. Therefore, the claim would be better if written to set forth that the "method" is a "computer implemented method", that the model is initialized "using an information processing system", for example.
5. Claims 1, 8 and 15, step c is directed to "computing a composite cost" and step d is directed to "determining a step size and a model update direction". However, it is unclear whether step d uses the composite cost or error that is calculated in step c. It appears that the cost function set forth in step c is used in the equation defining the model update direction in claims 4, 11 and 18 as well as the updating function in claims

7, 14 and 21, however, the language of claims 1, 8 and 15 step d does not reflect that this equation is used for the step size and update direction.

***Claim Rejections - 35 USC § 112***

6. The rejection of the claims under second paragraph of 35 U.S.C. 112 recited in the 4/8/08 Office Action have been withdrawn in view of the amendments to the claims filed 7/8/08.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1, step c is directed to "computing a composite cost". Lines 1-3 of step c set forth what the composite cost "comprises". Then, lines 3-4 of step c define a cost function that is used to compute the error. The language of this step is confusing since lines 1-3 appear to set forth a description of the cost function equation of line 4. Is the "composite cost" calculated by the "cost function"? Further, lines 3-4 set forth that the cost function is used to compute the error. Is the "error" the "composite cost"? It appears that the error must be known in order to calculate the composite cost using the cost function.

10. Claims 8 and 15 are rejected for the same reason as Claim 1 with regard to step c.

11. Claim 8 recites a "computer-based system" comprising "computer hardware elements that are configured to execute" followed by "means for" language. The amended language regarding the "computer hardware elements that are configured to execute" could be interpreted to be an incomplete statement (since the limitation does not set forth *what* they execute). Therefore, the claim would be better if written, for example, "an information processing system" or "a processor" and "a memory" instead of "computer hardware elements that are configured to execute".

***Claim Rejections - 35 USC § 101***

12. The rejection of Claims 8-14 under 35 U.S.C. 101, recited in the 4/8/08 Office Action have been withdrawn in view of the amendments to the claims filed 7/8/08.

***Claim Rejections - 35 USC § 102***

13. The rejection of Claims 1, 2, 8, 9, 15 and 16 are rejected under 35 U.S.C. 102(b) recited in the 4/8/08 Office Action have been withdrawn in view of the amendments to the claims filed 7/8/08.

***Allowable Subject Matter***

14. Claim 1, 4, 5, 7, 8, 11, 12, 14, 15, 18, 19 and 21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Response to Arguments***

15. Applicant's arguments, see pages 8-9, filed 7/8/08, with respect to Claims 1, 8 and 15 have been fully considered and are persuasive. The rejections of claims 1, 8 and 15 have been withdrawn.

***Conclusion***

16. Any indication of allowability of the claims rejected under 35 USC 112 2<sup>nd</sup> paragraph, but not on prior art is being held in abeyance pending the manner in which applicant amends or responds to this rejection under 35 USC 112 2<sup>nd</sup> paragraph.

17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary C. Jacob whose telephone number is 571-272-6249. The examiner can normally be reached on Tuesday-Thursday, 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mary C Jacob/

Examiner, Art Unit 2123

/M. C. J./

9/16/08

/Paul L Rodriguez/

Supervisory Patent Examiner, Art Unit 2123